


**PATIENT PRESENTING CLINICAL SIGNS**

Deacon Gassard History: Progressive weight loss, lethargy, panting/restlessness. Rads revealed splenic nodules - u/s rec to evaluate further

**SPECIES**

Canine

Abnormal PE/Chem/CBC/UA Results: Platelets 549 (170-400)

**BREED**
**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

Wheaton Terrier

**SEX**
**Urinary System**

The urinary bladder is moderately distended with anechoic urine, and no luminal sediment is present. The ureteral papillae, trigone and pelvic urethra are of normal appearance, and the ureters are not visible (normal). No masses, calculi or mucosal irregularities are noted. Urethra visualized to 3.0 cm.

Neutered Male

**AGE**

The prostate is of appropriate size for patient age and neutering status, with a homogenous parenchyma and smooth capsule. The prostatic urethra is non-dilated with normal margins.

13 years

**WEIGHT**

Both kidneys are hyperechoic and exhibit moderately decreased cortico-medullary differentiation. There is a small cortical cyst present within the left kidney. There is no evidence of nephrolithiasis, mineralization, pyelectasia or hydronephrosis. The proximal ureters are not visible (normal). The left kidney is 5.5 cm in length. The right kidney is 5.6 cm in length.

NP

**INTERPRETED BY**
**Adrenal Glands**

Tam Mengine, DVM,  
DABVP (canine/feline  
practice)

The adrenal glands are both identified in their normal locations. They are normal in size and shape with appropriate parenchymal echogenicity and normal phrenic vasculature. The left adrenal gland height is 6.1 mm at the cranial pole and 6.2 mm at the caudal pole. The right adrenal gland height is 5.6 mm at the cranial pole and 5.1 mm at the caudal pole.

**IMAGING PERFORMED BY**

Val Shumskaya

**Spleen**

The spleen is of appropriate size and has a normal, homogenous parenchyma with a smooth, continuous capsular surface. The splenic vasculature is normal with no evidence of congestion or thrombosis, and blood flow through the splenic hilus appears normal.

**HOSPITAL NAME**

Midland Park Vet

**Liver**

The liver is diffusely hyperechoic and subjectively enlarged. There are multiple hypoechoic and inhomogenous nodules present within the right caudal lobe, measuring up to 1.8 cm. The portal and hepatic vasculature are of normal size and appearance with no evidence of congestion or thrombosis.

**REFERRING VET**

Dr. Shokoff

The gallbladder is moderately distended with anechoic contents. The wall was thin and continuous with no focal lesions. The cystic and common bile ducts are normal / not visible.

**INVOICE**

13990

**Gastrointestinal**

The stomach is moderately distended with gas. The gastric wall is 5.2 mm with normal deviations due to rugal folds and exhibits appropriate wall layering. The pylorus is of normal appearance.

**DATE**

8.7.23

The small bowel has focal changes to the normal 1:3 muscularis to mucosa ratio. Wall measurements are increased up to 6.2 mm. The jejunum is focally corrugated, and adjacent to hyperechoic omental fat. Overall wall layering is preserved.

The visible portions of the colon are of normal thickness, up to 1.6 mm, with intact wall layering. The ileocecal junction is visualized and appears normal.


**PATIENT** *Pancreas*

Deacon Gassard

The areas of the limbs and body of the pancreas are isoechoic to the surrounding mesenteric fat, with normal capsular appearance. There is no evidence of peripancreatic inflammation. The pancreatic duct appears normal.

**SPECIES**

Canine

*Free Abdomen*

There is no evidence of free fluid within the peritoneal cavity. The omentum and intra-abdominal fat are of appropriate echogenicity. Enlarged abdominal lymph nodes are not observed. The aortic trifurcation has normal blood flow with no evidence of thrombosis.

**BREED**

Wheaton Terrier

**ULTRASONOGRAPHIC FINDINGS**
**SEX**
**Primary Findings**

Neutered Male

- Multiple inhomogenous liver nodules
- Focally thickened small intestines, suggestive of infiltrative bowel disease

**AGE**

13 years

**WEIGHT**
**Secondary Findings**

NP

- Chronic renal changes

**INTERPRETED BY**

 Tam Mengine, DVM,  
 DABVP (canine/feline  
 practice)

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Although there were no nodules noted within the parenchyma of the spleen, there were nodules present within the right caudal lobe of the liver. The appearance of the nodules is nonspecific and could be contributed to vacuolar hepatopathy, regenerative nodules, or less likely, neoplasia. Ultrasound-guided or laparoscopic biopsies would be needed for definitive diagnosis.

**IMAGING PERFORMED BY**

Val Shumskaya

The appearance of the small intestine raises the possibility of inflammatory bowel disease, or less likely, gastrointestinal lymphoma. Given the breed, a protein-losing nephropathy would be a consideration, especially given the weight loss (if laboratory finding support this). Additional recommendations include:

**HOSPITAL NAME**

Midland Park Vet

- Fecal parasite testing and empiric Fenbendazole treatment
- Trials with an ultra-low-fat diet. Some patients may require a hydrolyzed diet, if not responding to initial therapy.
- A complete GI panel, or empiric cobalamin supplementation
- A resting cortisol level is recommended to screen for atypical hypoadrenocorticism, and can be included as part of the Gi panel to Texas A&M. Alternately a urine cortisol: creatinine ratio can be used to screen for hypoadrenocorticism.
- Empiric therapy with prednisolone at 2-4mg /kg initial dose should be instituted if biopsies are not pursued.
- Definitive diagnosis would require biopsy of the affected tissue, ideally with intra-operative ultrasonographic guidance. If there is concurrent lymphadenopathy, ultrasound-guided sampling of the lymph node using a 25 or 22g needle could be considered.

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Dr. Shokoff

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**DATE**

The changes in the kidneys are consistent with chronic renal disease. Findings should be correlated with laboratory values, IRIS staging and clinical signs.

8.7.23



**PATIENT**

Deacon Gassard

**SPECIES**

Canine

**BREED**

Wheaton Terrier

**SEX**

Neutered Male

**AGE**

13 years

**WEIGHT**

NP

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**IMAGING  
PERFORMED BY**

Val Shumskaya

**HOSPITAL NAME**

Midland Park Vet

**REFERRING VET**

Dr. Shokoff



The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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**DATE**

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Thank you for this referral. If the clinical or image interpretation does not parallel your findings or if I can be of any further assistance, please contact me.

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